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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,026	09/18/2003	Darrin W. Kabel	702.254	9123

7590 06/01/2005

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EXAMINER

STONE, JENNIFER A

ART UNIT PAPER NUMBER

2636

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/667,026

Applicant(s)

KABEL ET AL.

Examiner

Jennifer A. Stone

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 2: Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Michaelson et al. (US 6,734,808).

For claim 1, Michaelson discloses a method for marine navigation, comprising (col 2, Ins 11-14 and 35-38): identifying a potential waypoint (Fig. 28, points A-F; col 23, Ins 30-32 and 39-41); and performing a marine route calculation algorithm to analyze a course between a first location and the potential waypoint in view of preselected conditions (col 23, Ins 64-67; col 24, Ins 33-45 and 62-66).

For claim 2, Michaelson discloses performing the marine route calculation algorithm to include analyzing cartographic data that include preselected conditions between the first location and the potential waypoint with a preference for avoiding preselected conditions (col 24, Ins 37-45).

Art Unit: 2636

For claim 3, the marine route calculation algorithm further includes re-routing the course to avoid the preselected conditions when the marine route calculation algorithm identifies one or more preselected conditions between the first location and the potential waypoint (col 24, Ins 25-37 and 55-61).

For claim 4, re-routing the course calculated further includes identifying one or more non-user waypoints (determined by the system, not the user) between the first location and the potential waypoint (col 24, Ins 41-50 and 55-64).

For claim 5, Michaelson determines a first location on the course based on a signal from a GPS; and analyzing cartographic data for a predetermined area around the first location for preselected conditions (col 7, Ins 50-65; col 8, Ins 11-21 and 46-51).

For claim 6, an alert signal is provided when the analyzed cartographic data for the predetermined area around the first location includes preselected conditions (col 2, Ins 11-14; col 6, Ins 13-17).

For claim 7, an alert signal is provided when the analyzed cartographic data for the predetermined data between the first location and the potential waypoint includes preselected conditions (col 6, Ins 13-26).

For claim 8, the alert signal includes emitting an audio alert (col 6, Ins 15-18; Fig. 2, item 28).

For claim 9, Michaelson discloses providing the alert signal to include displaying a visual alert.

Art Unit: 2636

For claim 10, Michaelson discloses receiving preselected conditions selected from the group of land, water depth, rock(s), sandbars, shelves, tide condition, tidal data, wind conditions, weather conditions, ice, above-water obstacles, underwater obstacles, type of water bottom, and prohibited areas (col 2, lns 41-43; col 8, lns 28-36 and 40-52).

3. Claims 11-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Michaelson et al. (US 6,734,808).

For claim 11, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 1 and 6 as stated above.

For claim 12, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 13, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 4 as stated above.

For claim 14, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 7 as stated above.

For claim 15, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 16, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 17, Michaelson discloses analyzing cartographic data further comprises acquiring cartographic data from a GPS (col 7, lns 54-56).

For claim 18, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 10 as stated above.

Art Unit: 2636

4. Claims 23-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Michaelson et al. (US 6,734,808).

For claim 23, Michaelson discloses a computer readable medium having a set of computer readable instructions (col 11, lns 38-41), the set of computer readable instructions comprising instructions for: identifying a potential waypoint upon a first event (col 23, lns 30-41); and performing a marine route calculation algorithm to analyze a course between a first location and the potential waypoint in view of preselected conditions (col 27, lns 11-20).

For claim 24, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 2 as stated above.

For claim 25, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 26, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 4 as stated above.

For claim 27, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 28, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 29, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 17 as stated above.

For claim 30, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 7 as stated above.

Art Unit: 2636

For claim 31, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 8 as stated above.

For claim 32, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 9 as stated above.

For claim 33, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 10 as stated above.

5. Claims 34-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Michaelson et al. (US 6,734,808).

For claim 34, Michaelson discloses an electronic marine navigation device, comprising: a processor (col 2, lns 41-44; Fig. 40, item 486); a location input operatively coupled to the processor (col 5, lns 12-15; Fig. 40, item 24), wherein the location input receives a first location and a potential waypoint separate from the first location (col 23, lns 30-32 and 39-41; Fig. 28); and a memory operatively coupled to the processor and the location input (col 31, lns 18-24; Fig. 40, item 4760), the memory having cartographic data including preselected conditions (Fig. 40, 4800; col 31, lns 48-51), wherein the processor operates on a marine route calculation algorithm to analyze a course between the first location and the potential waypoint in view of preselected conditions of the cartographic data (col 23, lns 30-41).

For claim 35, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 2 and 34 as stated above.

For claim 36, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 3 and 34 as stated above.

For claim 37, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 4 and 34 as stated above.

For claim 38, Michaelson discloses a receiver for a GPS (Fig. 2, GPS, 14; Fig. 40, item 24) operatively coupled to the processor, wherein the processor determines the first location on the course based on a signal received from the GPS (col 7, lns 50-56), and analyzes cartographic data for a predetermined area around the first location for preselected conditions (col 5, lns 9-15).

For claim 39, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 6 and 34 as stated above.

For claim 40, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 7 and 34 as stated above.

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 44 is rejected under 35 U.S.C. 102(b) as being anticipated by Mounce (US 4,340,936).

Mounce discloses a method for marine navigation, comprising: identifying a potential waypoint (col 3, lns 38-43 and 51-56); and performing a marine route calculation algorithm to analyze a course between a first location and the potential waypoint in view of preselected conditions received from a user and selected from the group of land, water depth, rock(s), sandbars, shelves, tide condition, wind conditions, weather conditions, ice, above-water obstacles, underwater obstacles, type of water bottom, and prohibited areas (col 3, lns 2-6 and 10-12; col 4, lns 9-20; Fig. 1, items 1-5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvath et al. (US 6,473,003).

For claim 19, Horvath discloses identifying a user defined graphical filter area on a display; analyzing cartographic data within the user defined graphical filter area for preselected conditions; and providing an alert signal when cartographic data within the user defined graphical filter area indicate preselected conditions. Even though Horvath's primary application is aircraft navigation, it would have been obvious one of ordinary skill in the art, at the time the invention was made to apply the disclosure of Horvath to a marine navigation system so that a user has a certain degree of control over the display in order to customize it according to the user's preferences. In addition, the graphical filter area is applied to one or more display maps, such as weather, terrain, and traffic. All of the aforementioned maps are also applied to marine navigation (col 7, lns 26-31).

For claim 20, identifying the user defined graphical filter area includes repositioning the user defined graphical filter area (col 2, lns 26-37).

Art Unit: 2636

For claim 21, Horvath includes analyzing cartographic data further comprises acquiring cartographic data from a GPS (col 4, lns 54-56; Fig. 7, item 110, 123-125).

For claim 22, Horvath discloses receiving preselected conditions selected from the group of land, water depth, rock(s), sandbars, shelves, tide condition, tidal data, wind conditions, weather conditions, ice, above-water obstacles, underwater obstacles, type of water bottom, and prohibited areas (col 4, lns 60-63; col 7, lns 26-31; Fig. 7, items 124, 125).

9. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michaelson et al. (US 6,734,808), as applied to claim 34, and further in view of Horvath et al. (US 6,473,003).

Michaelson discloses a processor to operate on the marine route calculation algorithm to analyze cartographic data, wherein the processor provides an alert signal when the analyzed cartographic data includes preselected conditions; however, Michaelson does not disclose a user defined graphical filter area. Horvath, on the other hand, does disclose a user defined graphical filter area (col 1, lns 10-14; col 2, lns 30, 31, 44-48) wherein a processor operates to analyze cartographic data and provides an alert signal when the analyzed cartographic data for the user defined graphical filter area includes preselected conditions (col 2, lns 60-63; Fig. 4, 30i). Even though Horvath's primary application is aircraft navigation, it would have been obvious to apply a user defined graphical filter area to a marine navigation system so that a

Art Unit: 2636

user has a certain degree of control over the display in order to customize it according to the user's preferences.

10. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michaelson et al. (US 6,734,808), as applied to claim 1, and further in view of Mounce (US 4,340,936).

Michaelson does not disclose a first location and a potential waypoint independent of a current location; however, Mounce discloses this feature (col 7 lns 36-42). Mounce is only concerned with parameters between a point of origin and a waypoint. It would have been obvious to disregard a current location between a first location and a potential waypoint and place a higher priority on parameters such as distance to waypoint and current drift in order to predict a course.

11. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michaelson et al. (US 6,734,808), as applied to claim 1, and further in view of Wyant et al. (US 6,885,919).

Michaelson includes a course related to current heading; however, Wyant discloses a portion of a course for marine navigation that is unrelated to a current heading of a device implementing (col 1, lns 4-14; col 4, lns 36-50) the method. After a route is planned (Fig. 1), the system will re-route the vessel according to the following parameters depicted in Fig. 2, items 21, 22, and 24, which are unrelated to a current heading of the vessel. It would have been obvious for a portion of the course to be unrelated to a current heading, and related to other

Art Unit: 2636

parameters, such as fuel level, so that a sufficient amount of fuel is available to reach a destination thereby ensuring the safety of the vessel and its passengers.

Response to Remarks

12. Applicant's arguments filed May 4, 2005 have been fully considered but they are not persuasive.

The Applicant argues as follows:

a. Michaelson does not disclose waypoints in view of pre-selected conditions.

b. Horvath fails to disclose a user-defined graphical filter area for pre-selected conditions.

a. A waypoint is defined as a point between major points on a route, as along a track. Michaelson, therefore, discloses multiple waypoints (col 4, Ins 1 and 2; Fig. 28, items A-F). In addition, Michaelson discloses a system that analyzes a course between a first location and the potential waypoint in view of pre-selected conditions (col 23, Ins 30-44). The pre-selected conditions are hazardous terrain or obstructions (col 25, Ins 21-34). Furthermore, pre-selected conditions of independent claims 1, 11, 23, and 34 are not limited to user-defined conditions, therefore, Michaelson discloses the computer/machine defined pre-selected conditions (col 6, Ins 27-35).

b. The graphical filter area disclosed by Horvath is considered to be user-defined because the user can choose between two modes: a set scale distance mode and a fixed distance mode. In addition, the pre-selected

Art Unit: 2636

conditions consist of selected targets within a user-defined boundary (col 7, Ins 3-7).

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

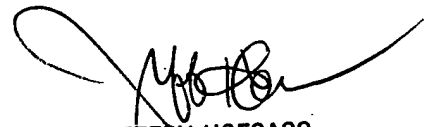
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Stone whose telephone number is (571) 272.2976. The examiner can normally be reached on M-F from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass, can be reached at (571) 272.2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Stone
January 5, 2004



JEFFERY HOFSSASS
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